



PATENT
Docket No.: 57909/428

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Briles et al.

Serial No. : 09/298,523

Cnfrm. No. : 2114

Filed : April 23, 1999

For : PNEUMOCOCCAL SURFACE PROTEIN C
(PSPC), EPITOPIC REGIONS AND STRAIN
SELECTION THEREOF, AND USES
THEREFOR

Examiner:
Nita Minnifield

Art Unit:
1645

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§ 1.97-1.98

Mail Stop RCE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR §§ 1.97-1.98, applicants hereby bring to the attention of the United States Patent and Trademark Office, the enclosed references listed on the attached PTO/SB/08 form.

Pursuant to 37 C.F.R. § 1.98(a)(2)(ii), copies of the cited U.S. Patent Application Publications and U.S. Patents (i.e., Reference Cite Nos. 1-7) are not enclosed. Copies of all other listed references (i.e., Reference Cite Nos. 8-38) are enclosed herewith. The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment, to Deposit Account No. 14-1138.

Respectfully submitted,

Date: September 6, 2005

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Certificate of Mailing - 37 CFR 1.8(a)	
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450, on the date below.	
Date <u>Sept. 6, 2005</u>	<u>Ruth R. Smith</u> Ruth R. Smith

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet	1	of	3
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Complete if Known

Application Number	09/298,523
Filing Date	April 23, 1999
First Named Inventor	Briles
Art Unit	1645
Examiner Name	Nita Minnifield
Attorney Docket Number	57909/428

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	8	CA 2,104,014	08-16-1992	Briles et al.		
	9	CA 2,116,261	10-21-1994	Briles et al.		
	10	CA 2,149,345	11-21-1995	Briles et al.		
	11	CA 2,232,033	03-20-1997	Briles et al.		
	12	CA 2,253,252	11-06-1997	Masure et al.		
	13	EP 0 695 803	02-07-1996	Briles et al.		
	14	WO 92/14488	09-03-1992	Briles et al.		
	15	WO 93/24000	12-09-1993	Yother		
	16	WO 98/21337	05-22-1998	Hostetter et al.		
	17	WO 02/08426 A2	01-31-2002	Bjorck et al.		

Examiner
Signature

Date
Considered

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE
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(use as many sheets as necessary)

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Examiner Name	Nita Minnifield
Attorney Docket Number	57909/428

Sheet 2 of 3

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	18	GENBANK ACCESSION NO. AF067128 by Hostetter et al. (May 18, 1998)	
	19	SWIATLO et al., "Genetic Analysis of Pneumococcal Surface Protein A (PspA) Using Southern Blot Hybridization with Oligonucleotide Probes," 93 rd ASM General Meeting, Abstract D-70, p. 107 (1993) (abstract)	
	20	CRAIN et al., "Simultaneous Expression of Two Apparent PspA Molecules by Some Capsular Group 6 Isolates of <i>Streptococcus pneumoniae</i> ," 93 rd ASM General Meeting, Abstract D-71, p. 107 (1993) (abstract)	
	21	BROOKS-WALTER et al., "Restriction Fragment Length Polymorphism Analysis of the Pneumococcal Surface Protein A (PspA) of <i>Streptococcus pneumoniae</i> ," 94 th ASM General Meeting, Abstract D-61 (1994) (abstract)	
	22	JEDRZEJAS, "Pneumococcal Virulence Factors: Structure and Function," <i>Microb. Mol. Biol. Revs.</i> 65(2):187-207 (2001)	
	23	DONNELLY et al., "Technical and Regulatory Hurdles for DNA Vaccines," <i>Int. J. Parasitol.</i> 33:457-467 (2003)	
	24	DEONARAIN, "Ligand-Targeted Receptor-Mediated Vectors for Gene Delivery," <i>Exp. Opin. Ther. Pat.</i> 8(1):53-69 (1998)	
	25	GÓRECKI, "Prospects and Problems of Gene Therapy: An Update," <i>Exp. Opin. Emerging Drugs</i> 6(2):187-198 (2001)	
	26	VERMA et al., "Gene Therapy - Promises, Problems and Prospects," <i>Nature</i> 389:239-245 (1997)	
	27	ECK et al., Goodman & Gilman's The Pharmacological Basis of Therapeutics, 9 th Ed., McGraw-Hill, New York, New York, pp.77-101 (1996)	
	28	BALACHANDRAN et al., "Role of Pneumococcal Surface Protein C in Nasopharyngeal Carriage and Pneumonia and Its Ability to Elicit Protection Against Carriage of <i>Streptococcus pneumoniae</i> ," <i>Infection and Immunity</i> 70(5):2526-2534 (2002)	

Examiner Signature	Date Considered
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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	29	ROSENOW et al., "Contribution of Novel Choline-Binding Proteins to Adherence, Colonization and Immunogenicity of <i>Streptococcus pneumoniae</i> ," <i>Molecular Biology</i> 25(5):819-829 (1997)	
	30	SWIATLO, E., "Studies of Surface Proteins of <i>Streptococcus pneumoniae</i> ," Database Fed Rip on Dialog, Identifying No. 116507 (1997)	
	31	PRUITT et al., "Binding of Human Complement Factor H by PspC of <i>Streptococcus pneumoniae</i> ," <i>FAESB Journal</i> 16(4):A306-A307 (2002)	
	32	HOLLINGSHEAD et al., " <i>Streptococcus pneumoniae</i> : New Tools for an Old Pathogen," <i>Current Opinion in Microbiology</i> 4:71-77 (2001)	
	33	BRILES et al., "Pneumococcal Diversity: Consideration for New Vaccine Strategies with Emphasis on Pneumococcal Surface Protein A (PspA)," <i>Clinical Microbiology Reviews</i> 11(4):645-657 (1998)	
	34	IANNELLI et al., "Allelic Variation in the Highly Polymorphic locus <i>pspC</i> of <i>Streptococcus pneumoniae</i> ," <i>Gene</i> 284:63-71 (2002)	
	35	JANULCZYK et al., "Hic, a Novel Surface Protein of <i>Streptococcus pneumoniae</i> That Interferes with Complement Function," <i>Journal of Biological Chemistry</i> 275(47):37257-37263 (2000)	
	36	BALTIMORE et al., "Pneumococcal Infections," in <i>Bacterial Infection</i> , Chapter 28, Brachman (ed.), Plenum Publishing Corporation, New York (1997)	
	37	JARVA et al., "Complement Resistance Mechanisms of Streptococci," <i>Molecular Immunology</i> 40:95-107 (2003)	
	38	BRILES et al., "Pneumococcal Proteins That May Constitute the Next Generation Vaccine for Pneumococcal Disease," <i>International Congress Series</i> 1257:27-31 (2003)	

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